REMARKS

Reconsideration and allowance are respectfully requested.

The undersigned appreciates the courtesies extended during the interview conducted on January 6, 2009. The undersigned outlined the differences between claims 1 and 16 and Komatsu. Potential amendments to strengthen those differences were presented and discussed. In addition, amendments to overcome the rejection of claim 14 were suggested and discussed. With the amendments made to the specification and claims in light of the interview, and for the reasons presented during the interview and below, the application is believed to be in condition for allowance.

Regarding the rejection of claim 14 under 35 USC 112, first paragraph, the claim now recites: "A computer readable medium storing a computer program product including program code portions that when executed by a computer perform the steps of claim 1." Moreover, the "data carrier" language in the specification is deleted. These amendments were agreed during the interview to overcome this rejection.

Applicants note with appreciation the indication of allowable subject matter in claims 6, 8, 9, and 13.

Claims 1, 4, 5, 7, 10, and 14-18 stand rejected for obviousness based on Komatsu and Issakson. This rejection is respectfully traversed.

Komatsu lacks features from claims 1 and 16. For example, the pilot symbols in Komatsu, which are mapped by the Examiner to the claimed code, are used to determine channel estimates. But Komatsu's pilot symbols are not compensated using those channel estimates. Instead, information symbols, which are different from the pilot symbols, are compensated using

those pilot symbol-based channel estimates. Komatsu fails to teach compensating the pilot symbols using a channel estimate determined from the pilot symbols.

More specifically, the channel estimates for the m-th information symbols (not pilot symbols) in the n-th time slot are determined in Komatsu based on the weighted average of received pilot symbols—not information symbols. See col. 3, lines 10-22. Those pilot symbols are stored in memory. See col. 3, lines 5-12. Komatsu compensates an information symbol with those channel estimates and not the pilot symbols. In contrast, claim 1 recites "calculating at least one channel estimate using a code symbol at a particular symbol instant" to make this distinction clearer that a code symbol is compensated using a compensation value for based on a channel estimate for the same code symbol. Similar language is recited in claim 16.

Another distinction relates to the fact that pilots are used after the access to the base station has been granted. Komatsu and Isaksson relate to message transmissions that carry information and pilot symbols which are transmitted after access has been granted. But the claims are directed to the access granting process. The first step in claim 1 is "receiving an access control signal, which carries access control information and a code containing a sequence of code symbols, in response to an access request signal."

To assist in understanding this distinction between access and post-access and by way of non-limiting example, page 8, lines 10 to 20 of the original specification describes that the 3GPP reverse acknowledgement (RA) scheme comprises a reverse link (uplink UL) component that stretches from the user equipment UE towards the base station BS and a forward link (downlink DL) component that stretches from the BS to the UE. The UL component is called Physical Random Access CHannel (PRACH) and the DL component is called Acquisition Indicator CHannel (AICH). In other words, the PRACH and AICH are channels used in the access request

and access granting process. In general, UEs use the UL PRACH for transmitting access request signals and messages to the BS, while the BS uses the DL AICH to transmit to the UE access control information generated in response to detection of an access request.

Any successfully-received preamble on the UL PRACH carrying a specific signature code is assigned to the corresponding acquisition indicator (AI) code on the DL AICH. This allows a requesting UE, which is aware of its own preamble signature code, to fetch the correct AI signature code on the DL AICH. When an access request signal is sent, an access control signal is then sent in response thereto, which carries access control information, e.g., the information that the access request signal is detected, and the UE should send a message carrying information (true for AI = -1), or that the access request signal should be resent at an increased power level (true for AI = 0), or that the access request signal has been detected and the user equipment should not send a message carrying information (true for AI = -1) (see page 10, lines 8 to 20).

In other words, a UE monitors during the guard period following the transmission of a preamble on UL PRACH whether an AI including an AX signature code corresponding to the preamble signature code modulated onto the previously sent preamble(s) is detected on the DL AICH. If this is the case, the dedicated access control information included in the AI is assessed. In the case of a positive acknowledgement (AI = 1), the message is sent by the UE at the next UL PRACH access slot after AI transmission and reception. In the case of a negative acknowledgement (AI = -1), the UE refrains from sending the message and aborts preamble power ramping. In the case where the respective AI signature is not detected (AI = 0), the UE continues with preamble power ramping (see page 10, lines 28 to 37).

Claim 1 provides a very efficient, easy and reliable way of performing an access request

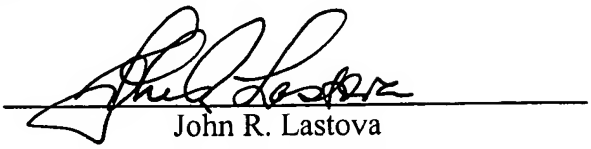
is provided by receiving an access control signal, which carries access control information and a code containing a sequence of code symbols, in response to an access request signal, by calculating at least one channel estimate using a code symbol at a particular symbol instant, and by determining for the code symbol a compensation value taking into account the at least one channel estimate for the same code symbol. Only when the access to the BS is granted does the UE send a data signal carrying information to the BS.

In contrast, neither Komatsu nor Isaksson relates to UEs equipments requesting access to a common network component, but instead to the transmission of messages carrying information and pilot symbols, which are transmitted, when the access has already been granted. As is known to the person skilled in this art and as described in column 1, lines 24 to 32 of Komatsu, known pilot symbols are inserted into an information signal at the transmitter to permit channel estimation at the receiver. Because Komatsu and Isaksson do not describe access requests, but only transmission of data signals carrying information and known content like pilot symbols, they fail to teach "receiving an access control signal, which carries access control information and a code containing a sequence of code symbols, in response to an access request signal," as recited in claim 1. Similar language is recited in claim 16.

The application is in condition for allowance. An early notice to that effect is respectfully requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
John R. Lastova
Reg. No. 33,149

JRL:maa
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100